

Exhibit A

POLYMER CHEMISTRY

An Introduction

SECOND EDITION

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To Marcia, Jeff, and Phil

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Table 13.1. Polyamides developed for commercial use^a

Structure	Generic and/or common name ^b	Type ^c
$\left[\text{NH}(\text{CH}_2)_5\text{C}(=\text{O}) \right]_n$	Nylon 6 (polycaprolactam)	F, P
$\left[\text{NH}(\text{CH}_2)_7\text{C}(=\text{O}) \right]_n$	Nylon 7 [poly(7-heptanoamide)]	F, P
$\left[\text{NH}(\text{CH}_2)_8\text{C}(=\text{O}) \right]_n$	Nylon 8 (polycapryllactam)	F, P
$\left[\text{NH}(\text{CH}_2)_9\text{C}(=\text{O}) \right]_n$	Nylon 9 [poly(9-nonanoamide)]	F
$\left[\text{NH}(\text{CH}_2)_{10}\text{C}(=\text{O}) \right]_n$	Nylon 11 [poly(11-undecanoamide)]	P
$\left[\text{NH}(\text{CH}_2)_{11}\text{C}(=\text{O}) \right]_n$	Nylon 12 (polylauryllactam)	P
$\left[\text{NH}(\text{CH}_2)_4\text{NHC}(=\text{O})(\text{CH}_2)_4\text{C}(=\text{O}) \right]_n$	Nylon 46 [poly(tetramethylene adipamide)]	F, P
$\left[\text{NH}(\text{CH}_2)_6\text{NHC}(=\text{O})(\text{CH}_2)_6\text{C}(=\text{O}) \right]_n$	Nylon 66 [poly(hexamethylene adipamide)]	F, P
$\left[\text{NH}(\text{CH}_2)_6\text{NHC}(=\text{O})(\text{CH}_2)_4\text{C}(=\text{O}) \right]_n$	Nylon 69 [poly(hexamethylene azelamide)]	P
$\left[\text{NH}(\text{CH}_2)_{10}\text{NHC}(=\text{O})(\text{CH}_2)_{14}\text{C}(=\text{O}) \right]_n$	Nylon 610 [poly(hexamethylene sebacamide)]	P
$\left[\text{NH}(\text{CH}_2)_6\text{NHC}(=\text{O})(\text{CH}_2)_{12}\text{C}(=\text{O}) \right]_n$	Nylon 612 [poly(hexamethylene dodecanedioamide)]	P
$\left[\text{NH} \text{---} \text{C}_6\text{H}_{10} \text{---} \text{CH}_2 \text{---} \text{C}_6\text{H}_{10} \text{---} \text{NHC}(=\text{O})(\text{CH}_2)_{10}\text{C}(=\text{O}) \right]_n$	Poly(methylene-4,4'-dicyclohexylene dodecanedioamide)	F
$\left[\text{NHCH}_2 \text{---} \text{C}_6\text{H}_{10} \text{---} \text{CH}_2\text{NHC}(=\text{O})(\text{CH}_2)_6\text{C}(=\text{O}) \right]_n$	Poly(1,4-cyclohexylenedimethylene suberamide)	F
$\left[\text{NH} \text{---} \text{C}_6\text{H}_4 \text{---} \text{NHC}(=\text{O}) \text{---} \text{C}_6\text{H}_4 \text{---} \text{C}(=\text{O}) \right]_n$	Poly(<i>m</i> -phenylene isophthalamide)	F
$\left[\text{NH} \text{---} \text{C}_6\text{H}_4 \text{---} \text{NHC}(=\text{O}) \text{---} \text{C}_6\text{H}_4 \text{---} \text{C}(=\text{O}) \right]_n$	Poly(<i>p</i> -phenylene terephthalamide)	F
$\left[\text{C}(=\text{O}) \text{---} \text{C}_6\text{H}_4 \text{---} \text{C}(=\text{O}) \text{---} \text{NHCH}_2\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_2\text{NH} \right]_n$	Poly(2,4,4-trimethylhexamethylene terephthalamide) ^d	P

^aExcluding copolymers.^bNylons prepared from lactams are named accordingly; others are prepared by polycondensation^cF = fiber, P = plastic^dThe 2,2,4-trimethyl isomer is also used